AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 10 (Canceled).

11. (Currently Amended) An interferometric measuring device for measuring at least one of a shape, a roughness, and a clearance distance of a surface of a measured object, comprising:

a radiation source;

a modulation interferometer coupled to the radiation source, wherein a short-coherent radiation is supplied to the interferometer by the radiation source, and wherein the interferometer includes:

a first beam splitter for splitting the radiation supplied into a first beam component and a second beam component;

a first arm for guiding the first beam component;

a second arm for guiding the second beam component;

a modulating device coupled to the first arm and the second arm downstream from the first arm and the second arm, the modulating device shifting one of a phase and a frequency of one of the first beam component and the second beam component relative to other of the first beam component and the second beam component;

a delay line coupled to the modulating device downstream from the modulating device and transmitting one of the first beam component and the second beam component; and

a second beam splitter positioned downstream of the delay line and combining the first beam component and the second beam component;

a measuring probe spatially separated from the modulation interferometer and coupled to the interferometer by a light-conducting fiber set-up downstream from the modulation interferometer, wherein the measuring probe includes a probe-optical fiber unit having a ~~slantwise~~ slanted exit surface on an object side, the probe-optical fiber unit splitting the combined first beam component and the second beam component into a measuring beam guided to the surface and a reference beam,

wherein the measuring beam reflected at the surface and the reference beam reflected at a reference plane are superposed;

a receiver device coupled to the measuring probe for converting received radiation into electrical signals; and

an evaluation device coupled to the receiver device for evaluating the electrical signals on the basis of a phase difference;

wherein an angle of inclination of the exit surface to the normal of ~~an~~ a longitudinal optical probe axis of the probe-optical fiber unit is at least 46°;

wherein the probe-optical fiber unit includes a first section and a second section, the second section being proximate to the measured object, wherein an exit surface of the first section slants at an exit angle with respect to an optical probe axis of the probe-optical fiber unit, and wherein an entrance surface of the second section slants at an entrance angle with respect to the optical probe axis, wherein a partially transmitting region in the form of a wedge-shaped gap is formed between the exit surface of the first section and the entrance surface of the second section, and wherein the exit surface of the first section and the entrance surface of the second section are inclined in the same direction with respect to the optical probe axis.

12. (Previously Presented) The device as recited in Claim 11, wherein the angle of inclination is at least 48°.

13. (Currently Amended) The device as recited in Claim 11, wherein an end section of the probe-optical fiber unit proximate to the measured object has a ~~jacket-like~~ jacketed covering including an antireflection material.

14. (Previously Presented) The device as recited in Claim 11, wherein the exit surface is provided with a reflection coating.

Claim 15. (Canceled).

16. (Currently Amended) The device as recited in Claim ~~15~~ 11, wherein the exit angle and the entrance angle are selected so that a Fresnel reflection is achieved.

17. (Currently Amended) The device as recited in Claim ~~15~~ 11, wherein the exit angle is between 5° and 8°, and the entrance angle is between the exit angle and 0°.

18. (Currently Amended) The device as recited in Claim ~~15~~ 11, wherein the first section and the second section are axially aligned and accommodated in a tubule-shaped accommodation that is surrounded by an outer tube, and wherein a positioning element is provided at an end section of the accommodation that is distant from the measured object, the positioning element surrounding the first section, and wherein the positioning element is accommodated concentrically within the tube, and wherein the second section is fixed within a front part of the accommodation proximate to the measured object, and wherein the first section is fixed within a rear part of the accommodation distant from the measured object.

19. (Previously Presented) The device as recited in Claim 18, wherein the front part of the accommodation is separated from the rear part of the accommodation by two gaps that are substantially diametrically opposite, a rear of a first gap being defined by an extension of the slanting exit surface of the first section of, and a front of a second gap being defined by an extension of the slanting entrance surface of the second section, and wherein the front part and the rear part of the accommodation are surrounded by a common sleeve-shaped retaining ring that is surrounded by the tube, and wherein a front portion of the second section has a lesser diameter compared to a rear portion of the second section.

20. (Currently Amended) The device as recited in Claim ~~15~~ 11, wherein the modulating interferometer includes at least partially a polarization-maintaining light-conducting structure in the form of one of an optical fiber conductor and integrated optics, and wherein light conduction within at least one of the first arm and the second arm is interrupted.